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REMARKS

Claims 7-12 are now pending in the application. Claims 7 and 10 have been amended herein to address indefiniteness issues raised in the Office Action.

Dependent claims 11-12 have been added. Entry of the amendments and favorable reconsideration of the application is respectfully requested.

I. REJECTION OF CLAIMS 7-10 UNDER 35 USC §112, 2nd ¶

Claims 7-10 are rejected under 35 USC §112, second paragraph, as being indefinite. Withdrawal of the rejection is respectfully requested for at least the following reasons.

On page 2 of the Office Action, the Examiner notes the claims should clearly indicate that the "further irradiating" step takes place on a subsequent rotation of the substrate. In accordance with the Examiner's suggestion, claims 7 and 10 have been to recite that the "further irradiating the photoresist film with the same beam" is performed during a subsequent rotation.

Applicants believe such amendments eliminate any indefiniteness in the claims. Withdrawal of the rejection is respectfully requested.

II. REJECTION OF CLAIMS 7-9 UNDER 35 USC §102(b)

Claims 7-9 stand rejected under 35 USC §102(b) based on Kawase. Withdrawal of the rejection is respectfully requested for at least the following reasons.

The present invention relates to a method for producing an optical disk master. As recited in claim 7, for example, *during a rotation of the substrate* the photoresist film on the substrate is irradiated with the beam so as to form a first beam trace in the photoresist film. Then, *during a rotation which is subsequent to the rotation during which the first beam trace is formed*, the photoresist film is further irradiated with the same beam such that the beam partially overlaps the first beam trace, so that a second beam trace is formed in the photoresist film.

Thus, the present invention enables the use of a single beam and thereby eliminates the need for the adjustment of two beams as required in the conventional

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methods described in the present specification and in Kawase. (See, e.g., Spec., p. 29, ln. 21 to p. 30, ln. 1).

Kawase discusses an optical data recording medium in which auxiliary clock pits are arranged in such a manner that at least one auxiliary pit is provided in a non-track region between two clock pits adjacent in the radial direction of the optical disk (See, e.g., Abstract). For example, Fig. 1 of Kawase illustrates auxiliary clock pits 104 located between adjacent clock pits 101.

The Examiner refers to Column 5, lines 4-14 of Kawase as teaching the invention as claimed. Applicants respectfully submit that, at best, Kawase is unclear as to precisely how such auxiliary clock pits are formed.

For example, the Examiner appears to highlight the disclosure in Kawase relating to forming the clock groove 501. In Fig. 8, the laser beam is deflected radially with a small pitch in such a manner that a number of clock pits 101 overlap each other, thus forming the clock groove 501. The Examiner indicates in such case, the disk is subjected to multiple exposure.

However, Kawase does not specifically describe a mechanism for forming a clock groove 501 as shown in Fig. 8. When discussing the embodiment in which a single auxiliary clock pit is placed between clock pits as in Fig. 1, a *two-beam* master cutting machine is used. When discussing how to perform the embodiment shown in Fig. 8, Kawase discusses the difficulty and high manufacturing costs involved.

As a result, Kawase at best describes a *two-beam* approach to forming a master (as compared to the *single beam* approach recited in present claim 7) with respect to the embodiment of Fig. 8, or is otherwise non-enabling and therefore a non-enabling reference.

In other words, one having ordinary skill in the art would not understand Kawase to teach further irradiating using a single laser beam on subsequent rotations (as recited in claim 7) in order to form the clock groove 501. Kawase is at best unclear and therefore non-enabling as to how to carry out the formation of such clock grooves 501 and therefore does not anticipate claim 7.

Accordingly, withdrawal of the rejection of claims 7-9 is respectfully requested.

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III. REJECTION OF CLAIMS 7-10 UNDER 35 USC §103(a)

Claims 7-10 stand rejected under 35 USC §103(a) based on Kawase in view of *Van et al.* Withdrawal of the rejection is respectfully requested for at least the following reasons.

Kawase does not teach or suggest the use of a same or single beam as recited in claims 7 and 10. Therefore, these claims may be distinguished over Kawase for at least the same reasons given above with respect to claim 7.

Van et al. does not make up for the deficiencies in Kawase. Rather, *Van et al.* is similar to Kawase in that *Van et al.* also describes a two-beam master cutting system. (See, e.g., Col. 3, Ins. 12-28). *Van et al.* does not teach or suggest using a same or single laser beam on subsequent rotations as recited in claims 7 and 10.

Withdrawal of the rejection is respectfully requested.

IV. NEW CLAIMS

New claims 11-12 are dependent claims further defining the inventions of claims 7 and 10, respectively. Each of these claims emphasizes that the first and second beam traces define a deformed portion of a track that is non-overlapping with an adjacent track.

Kawase describes clock pits adjacent to one another and formed in such a manner to overlap each other, thus providing an auxiliary clock groove extended in a direction perpendicular to the tracks. As can be seen from Fig. 8 of Kawase, the first and second traces do not define a deformed portion of a track which is non-overlapping with an adjacent track as recited in claims 11 and 12. Instead, the beam traces of one track overlap with the beam traces of an adjacent track.

Van et al. also describes overlapping adjacent tracks. The exposed areas 24 and 25 that are exposed to the beams 21 and 22 constitute an area corresponding to guide grooves 1 of Fig. 1 (i.e., tracks). (See, e.g., Col. 6, Ins. 11-14).

Accordingly, claims 11 and 12 may also be distinguished over the teachings of Kawase and *Van et al.*

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V. CONCLUSION

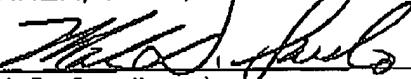
Accordingly, claims 7-12 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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